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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,492

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Gregg E. Skow

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EXAMINER

LOVEL, KIMBERLY M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/627,492	Applicant(s) SKOW, GREGG E.	
	Examiner KIMBERLY LOVEL	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-15,20-28,37 and 42-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-15,20-28,37 and 42-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 6-15, 20-28 and 37-49 are rejected.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 December 2008 has been entered.

Claim Objections

3. Claims 1, 15, 37 and 49 are objected to because of the following informalities:

Claim 1, lines 9-15 recite “a structure section that **includes at least a comprising** a plurality of feature mask tables, the each feature mask table **including data a feature** mask record for each of the multiple end-user systems that use one or more of the data tables that include the data records having one or more features, each feature mask record including one or more feature mask values that indicate **whether a particular one of the data records is the one or more features of a data record are compatible** with one or more of the end-user systems.” It appears that the lines contain typographical errors rendering the limitation unclear. Claim 37 and 49 contain similar errors.

Art Unit: 2167

Claim 15, line 11 recites the limitation “generating a feature mask that includes structure section.” Line 16 recites “whether a particular one of the stored data records is the one or more features of a data record are compatible.” It appears that the lines contain typographical errors rendering the limitation unclear.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 6, 7, 11, 15, 20, 21, 25, 37, 42, 43 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,804,664 to Hartman et al (hereafter Hartman) in view of US Patent No 5,710,915 to McElhiney (hereafter McElhiney).**

Referring to claim 1, Hartman discloses a program product, comprising:

a) a database that is compatible with multiple end-user systems, the database comprising:

a data section [content databases], each data table including a plurality of data records that each have one or more features that affect its compatibility with one or more of the end-user systems, each data record including a feature field that contains

Art Unit: 2167

one or more feature bits representative of each of its features [the database server looks up the fields in the correlation table 160 and retrieves the bitmask for the binary attributes] (see column 4, lines 35-46; column 6, lines 19-24; and column 7, lines 39-48); and

a structure section, the each feature mask table including data a feature mask record for each of the multiple end-user systems that use one or more of the data tables that include the data records having one or more features [user profile includes information about the client devices] (see column 6, lines 25-38 and column 7, lines 16-26), each feature mask record including one or more feature mask values that indicate whether a particular one of the data records is the one or more features of a data record are compatible with one or more of the end-user systems [binary attribute matching where user profile database can be matched against content profile database], and thereby indicate whether the data record is compatible with one or more of the end-user systems [holding list is a list of matching records] (see column 8, lines 9-18 and lines 54-61); and

b) at least one physical computer-readable medium having said database stored thereon (see Fig 1).

Hartman fails to explicitly disclose wherein the data section and the structure section each comprise of a plurality of tables. McElhiney discloses the partitioning of a data table into a plurality of tables (see column 7, lines 49-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to partition the data section and the structure sections of Hartman into a

plurality of tables as disclosed by McElhiney. One would have been motivated to do so to provide parallel access to the tables which accelerates access.

Referring to claim 6, the combination of Hartman and McElhiney (hereafter Hartman/McElhiney) discloses the program product of Claim 1, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems [the user profile and the client profile databases are considered to represent the information that uniquely identifies each end-user system] (Hartman: see column 6, lines 25-38 and column 7, lines 16-26).

Referring to claim 7, Hartman/McElhiney discloses the program product of Claim 6, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems [the user profile and the client profile databases are considered to represent the information that uniquely identifies each end-user system] (Hartman: see column 6, lines 25-38 and column 7, lines 16-26).

Referring to claim 11, Hartman/McElhiney discloses the program product of Claim 1, wherein: each data record includes a plurality of fields in addition to the feature field (see column 7, lines 36-38 and column 4, lines 35-46); and the structure section further comprises a field definition table that includes at least data representative of each of the data record fields [correlation table 160] (see column 7, lines 39-42).

Referring to claim 15, Hartman discloses a method of generating a database that is compatible with multiple end-user systems, the method comprising the steps of:
generating a data section [content databases] (see Fig 1);

Art Unit: 2167

storing a plurality of data records in the data section, each data record including a feature field [record with attributes] (see column 4, lines 35-46);

associating one or more features [attributes] with each data record (see column 4, lines 35-46);

supplying each feature field with one or more feature bits that represent each of the features associated therewith [the database server looks up the fields in the correlation table 160 and retrieves the bitmask for the binary attributes] (see column 6, lines 19-24 and column 7, lines 39-48); and

generating a feature mask that includes structure section that comprises a plurality of feature mask tables, each feature mask table including a feature mask record for each of the end-user systems that use one or more of the data tables that include the data records having one or more features [user profile includes information about client devices] (see column 6, lines 25-38 and column 7, lines 16-26); and

including one or more feature mask values, in each feature mask record, that indicate whether a particular one of the stored data records is the one or more features of a data record are compatible with one or more of the end-user systems [binary attribute matching where user profile database 140 can be matched against the content profile database], to thereby indicate whether the data record is compatible with one or more of the end-user systems [holding list is a list of matching records] (see column 8, lines 9-18 and 54-61).

Hartman fails to explicitly disclose dividing the data section into a plurality of data tables that each include a plurality of the data records. McElhiney discloses the

partitioning of a data table into a plurality of tables, including the limitation of dividing the data section into a plurality of data tables that each include a plurality of the data records (see column 7, lines 49-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to partition the data section and the structure sections of Hartman into a plurality of tables as disclosed by McElhiney. One would have been motivated to do so to provide parallel access to the tables which accelerates access.

Referring to claim 20, Hartman/McElhiney discloses the method of Claim 15, further comprising: generating a system identification table that includes data that uniquely identifies each of the end-user systems [the user profile and the client profile databases are considered to represent the information that uniquely identifies each end-user system] (Hartman: see column 6, lines 25-38 and column 7, lines 16-26).

Referring to claim 21, Hartman/McElhiney discloses the method of Claim 20, further comprising: including a plurality of system identification records in the system identification table, each system identification record associated with each of the end-user systems [the user profile and the client profile databases are considered to represent the information that uniquely identifies each end-user system] (Hartman: see column 6, lines 25-38 and column 7, lines 16-26).

Referring to claim 25, Hartman/McElhiney discloses the method of Claim 15, further comprising: including a plurality of fields in addition to the feature field (see column 7, lines 36-38 and column 4, lines 35-46); and generating a field definition table

Art Unit: 2167

that includes at least data representative of each of the data record fields [correlation table 160] (see column 7, lines 39-42).

Referring to claim 37, Hartman discloses a computer system, comprising: a processor; memory in operable communication with the processor; and a database stored in the memory (see Fig 1), the database compatible with multiple end-user systems and including:

a data section [content databases], each data table including a plurality of data records that each have one or more features that affect its compatibility with one or more of the end-user systems, each data record including a feature field that contains one or more feature bits representative of each of its features [the database server looks up the fields in the correlation table 160 and retrieves the bitmask for the binary attributes] (see column 4, lines 35-46; column 6, lines 19-24; and column 7, lines 39-48); and

a structure section, the each feature mask table including data a feature mask record for each of the multiple end-user systems that use one or more of the data tables that include the data records having one or more features [user profile includes information about the client devices] (see column 6, lines 25-38 and column 7, lines 16-26), each feature mask record including one or more feature mask values that indicate whether a particular one of the data records is the one or more features of a data record are compatible with one or more of the end-user systems [binary attribute matching where user profile database can be matched against content profile database], and thereby indicate whether the data record is compatible with one or more of the end-user

Art Unit: 2167

systems [holding list is a list of matching records] (see column 8, lines 9-18 and lines 54-61).

Hartman fails to explicitly disclose wherein the data section and the structure section each comprise of a plurality of tables. McElhiney discloses the partitioning of a data table into a plurality of tables (see column 7, lines 49-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to partition the data section and the structure sections of Hartman into a plurality of tables as disclosed by McElhiney. One would have been motivated to do so to provide parallel access to the tables which accelerates access.

Referring to claim 42, Hartman/McElhiney discloses the system of Claim 37, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems [the user profile and the client profile databases are considered to represent the information that uniquely identifies each end-user system] (Hartman: see column 6, lines 25-38 and column 7, lines 16-26).

Referring to claim 43, Hartman/McElhiney discloses the system of Claim 42, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems [the user profile and the client profile databases are considered to represent the information that uniquely identifies each end-user system] (Hartman: see column 6, lines 25-38 and column 7, lines 16-26).

Referring to claim 47, Hartman/McElhiney discloses the database of Claim 37, wherein: each data record includes a plurality of fields in addition to the feature field (see column 7, lines 36-38 and column 4, lines 35-46); and the structure section further comprises a field definition table that includes at least data representative of each of the data record fields [correlation table 160] (see column 7, lines 39-42).

6. Claims 8-10, 12-14, 22-24, 26-28 and 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,804,664 to Hartman et al in view of US Patent No 5,710,915 to McElhiney as applied to claims 1, 11, 15, 26, 37 and 45 above, and further in view of US Patent No 5,201,046 to Goldberg et al (hereafter Goldberg).

Referring to claims 8, 22 and 44, Hartman/McElhiney fails to explicitly disclose the further limitation of the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables. Goldberg discloses a relational database system, including the further limitation of the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables (see column 14, lines 31-54).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the definition table of Goldberg in order to describe the tables of Hartman/McElhiney. One would have been motivated to do so since definition table are well-known to one of ordinary skill in the art when dealing with database systems.

Referring to claims 9, 23 and 45, the combination of Hartman/McElhiney and Goldberg (hereafter Hartman/McElhiney/Goldberg) discloses the further limitation of the table pointer table comprises a plurality of table pointer records; and at least one table pointer record is associated with each of the data tables (Goldberg: see column 14, lines 31-54).

Referring to claims 10, 24 and 46, Hartman/McElhiney/Goldberg discloses the program product of Claim 9, wherein each table pointer record includes data representative of at least: a location of the associated data table; a number of the data records in the associated table; and a size of each data record in the associated data table (Goldberg: see column 14, lines 31-54).

Referring to claims 12, 26 and 48, Hartman/McElhiney fails to explicitly disclose the further limitation wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields. Goldberg discloses wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields [data type] (see column 6, lines 33-41; column 11, lines 37-59; and column 13, lines 51-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the definition table of Goldberg in order to describe the tables of Hartman/McElhiney. One would have been motivated to do so since definition table are well-known to one of ordinary skill in the art when dealing with database systems.

Referring to claims 13 and 27, Hartman/McElhiney fails to explicitly disclose the further limitation of a header section that includes data representative of indicia that is used to identify the database. Goldberg discloses the further limitation of a header section that includes data representative of indicia that is used to identify the database (see column 6, lines 33-41; column 11, lines 37-59; and column 13, lines 51-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the definition table of Goldberg in order to describe the tables of Hartman/McElhiney. One would have been motivated to do so since definition table are well-known to one of ordinary skill in the art when dealing with database systems.

Referring to claims 14 and 28, Hartman/McElhiney/Goldberg discloses the further limitation wherein the header section further includes data representative of a location of the structure section (Goldberg: see column 6, lines 33-41; column 11, lines 37-59; and column 13, lines 51-62).

7. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,804,664 to Hartman et al in view of US Patent No 5,710,915 to McElhiney in view of US Patent No 6,134,500 to Tang et al (hereafter Tang).

Referring to claim 49, Hartman discloses a computer system, comprising: a database stored in the memory (see Fig 1), the database compatible with multiple end-user systems and including:

Art Unit: 2167

a data section [content databases], each data table including a plurality of data records that each have one or more features that affect its compatibility with one or more of the end-user systems, each data record including a feature field that contains one or more feature bits representative of each of its features [the database server looks up the fields in the correlation table 160 and retrieves the bitmask for the binary attributes] (see column 4, lines 35-46; column 6, lines 19-24; and column 7, lines 39-48); and

a structure section, the each feature mask table including data a feature mask record for each of the multiple end-user systems that use one or more of the data tables that include the data records having one or more features [user profile includes information about the client devices] (see column 6, lines 25-38 and column 7, lines 16-26), each feature mask record including one or more feature mask values that indicate whether a particular one of the data records is the one or more features of a data record are compatible with one or more of the end-user systems [binary attribute matching where user profile database can be matched against content profile database], and thereby indicate whether the data record is compatible with one or more of the end-user systems [holding list is a list of matching records] (see column 8, lines 9-18 and lines 54-61).

Hartman fails to explicitly disclose wherein the data section and the structure section each comprise of a plurality of tables. McElhiney discloses the partitioning of a data table into a plurality of tables (see column 7, lines 49-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to partition the data section and the structure sections of Hartman into a plurality of tables as disclosed by McElhiney. One would have been motivated to do so to provide parallel access to the tables which accelerates access.

Hartman/McElhiney fails to explicitly disclose the further limitation wherein the database is a navigation database for a flight management system that creates an aircraft flight plan. Tang discloses a navigation database for a flight management system that creates an aircraft flight plan (see column 4, lines 33-63 and column 7, lines 14-31).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the navigation database of Tang with the system of Hartman/McElhiney. One would have been motivated to do so since the type of data does not influence the manner in which the system operates.

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY LOVEL whose telephone number is (571)272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John R. Cottingham/
Supervisory Patent Examiner, Art Unit 2167

/Kimberly Lovel/
Examiner
Art Unit 2167

11 April 2009
/KL/

Application/Control Number: 10/627,492
Art Unit: 2167

Page 16